



Custom Web Database as a Tool for Marketing Chemical Research

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Abstract

A flow chart for the development of web-accessible databases listing research imaging compounds synthesized in NIH laboratories is presented. By enabling public access to the laboratory research such databases provide an open medium for marketing and collaboration in future products development and other research activities.

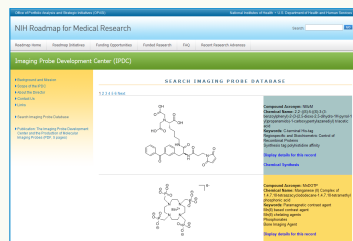
Introduction

Primarily, building the database provides instant access to the results obtained within the Image Probe Development Center (IPDC) research group to anyone in the scientific community interested in the results for scientific discovery; and it creates a marketing tool for new imaging probes to the benefit of the NIH research community; and, possibly in the future, for the larger scientific community as well.

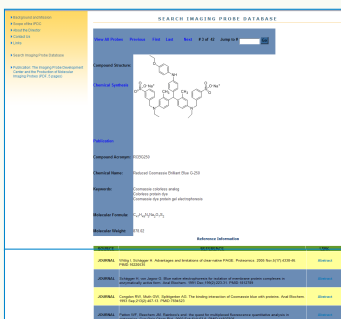


IPDC Research Center homepage

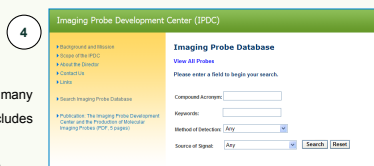
In addition, the database serves as a comprehensive archive of synthesized compounds characterized by their chemical and physical properties; their recommended application; or their potential use in future research or commercialization.



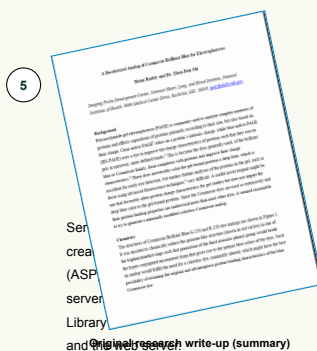
IPDC database main page



IPDC database – full record



IPDC database search page

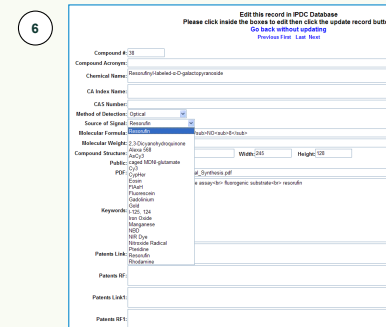


The data for each compound entry is compiled by the librarian from documents (write-ups) submitted by the IPDC and from the compound entries filed out by the authors, with attached structure drawings.

Methodology

The IPDC database and related web pages were developed by Hine Phonthachack, NIH Library Information Architecture Branch, and Barbara Brandys, NIH Library Information and Education Branch. The web pages are using Active Server Page a standard Microsoft IIS web. The data is stored on the Microsoft SQL server

Each compound entry provides links to the original research study, to the publications cited therein, and to the publications that resulted from research.

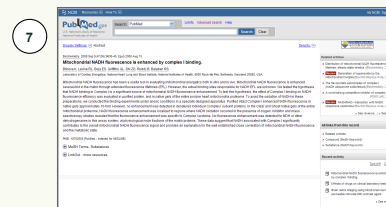


IPDC database data entry

The data is entered into the web pages in markup format with links to related documents and resources. The attachments are saved in 508 Compatible PDF format and the structures in JPEG format.

The database entries can have several levels of accessibility, are password protected, and can be hidden from public view.

To comply with copyright requirements, links to full-text articles utilize the PubMed® ID number or have direct links to the online journal articles or patents for the publications not indexed in PubMed. Consequently, IPDC database users are able to utilize their subscriptions to full-text journals or access (if available) free from publishers' sites or via PubMed Central authors' manuscripts.



PubMed record linked from the IPDC database reference section

Conclusion

The new web-based scientific communication tools, such as the database described above, are expected to take a leading role in building open access knowledge spaces. Sharing use, and re-use, of the scientific data across applications can revolutionize cooperative platforms between academia, industry, and government.

